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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/619,546

07/16/2003

Peter Schocggl

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11/28/2006

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EXAMINER

PIERRE LOUIS, ANDRE

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/619,546	Applicant(s) SCHOEGGL, PETER	
	Examiner Andre Pierre-Louis	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The amendment filed on 09/26/2006 has been received and fully considered; claims 1-7 are presented for examination.

2. The examiner withdraws the objection to the claims, in view of the amendment.

3. As per the objection to the drawings, the examiner maintains the objection, as the applicant fails to provide definition for the square/rectangular boxes within the drawings.

4. With regards to the rejection under 35 USC 112, the examiner withdraws the antecedent basis part of the rejection; however, as the applicant fails to clearly show each step provided in the method, the remaining part of the reject is maintained as set forth below. The examiner further notes that each step needs to be separated with a semicolon; however, giving the claims the broadest reasonable interpretation, a rejection of the claims is set forth below.

**Response to Arguments**

5. Applicant's arguments filed 02/24/2006 have been fully considered but they are not persuasive.

5.1 Applicant argues that Germann et al. does not calculate two different speed values, the examiner respectfully disagrees and assert that Germann et al. teaches calculating both an angular and rotational speed (see fig.3, col.1 line 64-col.2 line 66), and that the rotational speed is the true value used to simulation actual driving conditions (see fig.3, col.3 lines 10-62), where the vehicle speeds were supplied to the tire model for simulation of the slip. The examiner interprets the angular and rotational speed teaches by Germann et al. to be a functional equivalence of the first and second speed claimed by the applicant. However, Germann et al.

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further teaches the use of a measured angular speed and a nominal angular speed values corresponds to the vehicle velocity used in the tire model (see abstract).

5.2 While the applicants believe that the independent claim along with the dependent claims should be found allowable, the respectfully disagrees and asserts that the references cited teach the entire claimed invention. Found the applicants' arguments non-persuasive, the rejection of the independent claim along with their dependencies is maintained, as shown below.

### Drawings

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show details as described in the specification (*see para 3 above*). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Claim Objections**

7. Claim 1 are objected to because of the following informalities: line 9 refers to “the driving wheels”; however they no driving wheels previously mentioned in the claim. *Furthermore*, line13 refers to “the tire”; however, they is no mention of a tire, previously in the claim. *Additionally*, the word “to” in line 12 of the claim is misspelled and that the word should be spelled as “two”. Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8.1 Claims 1-7 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner as to what the applicants are trying to claim in the calculation step of the claim, for example “calculating simulation values of variables ..., and then goes on to say the values of the variable as determined immediately prior thereto are calculated”. The examiner further notes that each claim’s limitation needs to be separated by at least a semicolon to allow the examiner to better visualize the beginning and end of the limitations.

**Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9.0 Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Germann et al.

(U.S. Patent No. 6,754,615).

9.1 In considering the independent claim 1, Germann et al. teaches the functional equivalence of a method for simulating the driving behavior of vehicles on a test stand (*fig.3, col.6 lines 64-65*) comprising positioning an engine of the vehicle on the test stand (*fig.3 (10), col.6 lines 64-67*) and coupling the engine to an electronically controllable braking apparatus (*fig.3 (20), col.6 line 66-col.7 line 11*) and calculating simulation values of variables of a simulation model which are representative of the driving state of the vehicle (*fig.3 (40)*) in that the reaction of the vehicle to the behavior of the engine (*fig.3 (10)*) and the values of the variables as determined immediately prior thereto are calculated (*col.7 lines 12-15*), with at least vehicle speed (*col.3 lines 26-31*) and slip (*col.3 line 30 and col.8 line 27-31*) occurring in the driving wheels being calculated as variables (*col.3 lines 26-31*), said simulation model calculating to different vehicle speeds (*col.3 line lines 26-52 and col.7 lines 12-15*), namely a first vehicle speed considering the slip of the tires (*col.3 lines 26-52*) and a virtual vehicle speed changes by a corrected value compared to the first vehicle speed (*col.2 line 62-col.3 line 14 and col.9 lines 1-6*), controlling the engine using the first speed (*see fig.3 col.3 line lines 26-60*), and controlling the electric brake using the virtual vehicle speed (*see fig.3 col.3 line lines 26-60*). The examiner interprets the angular and rotational speed teaches by Germann et al. to be a functional equivalence of the first and second speed claimed by the applicant. However, Germann et al.

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further teaches the use of a measured angular speed and a nominal angular speed values corresponds to the vehicle velocity used in the tire model (see abstract).

9.2 As per claim 2, Germann et al. teaches that the corrected value depends primarily on short-term fluctuations of the slip (*see fig.3, col.1 line 5-col.4 line 49*), also *col.8 lines 15-27*).

9.3 With regards to claim 3, Germann et al. teach that a speed of non-driven wheels of the vehicle as calculated by the simulation model is changed by a further corrected value, which depends on the slip (*see fig.3, abstract, col.1 62-col.4 line 49*, also *col.8 lines 15-27*).

9.4 Regarding claim 4, Germann et al. teach that a slip by acceleration is reflected by a positive corrected value and a slip by retardation or blocking of the driven wheels is reflected by a negative corrected value (*see fig.3, col.1 line 5-col.4 line 49 and col.6 line 46-col.8 line 26*).

9.5 As per claim 5, Germann et al. teaches that lateral slip is considered or corrected by a further simulation model (*see fig.3, col.1 lines 1-64*, also *col.7 line 10-col.8 line 27*).

9.6 With regards to claim 6, Germann et al. teaches that inclinations of the vehicle chassis are taken into account (*see fig.3, col.1 line 5-col.4 line 49 and col.7 line 10-col.8 line 26*).

9.7 Regarding claim 7, Germann et al. teach that the speed calculated by the simulation model or the slip calculated by simulation model is used for electronic vehicle control or for electronic engine control (*see fig.3, col.1 line 5-col.4 line 49 and col.6 line 46-col.8 line 26*).

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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10.1 Turbett et al. (USPG\_PUB No. 2003/0167143) teaches a virtual transmission test cell.

10.2 Sanada et al. (U.S. Patent No. 5,986,545) teaches a vehicle driveability evaluation system.

10.3 List et al. (U.S. Patent No. 6,079,258) teaches a method for analyzing the driving behavior of motor vehicles, including generating a set of measured values.

10.4 Ybert (U.S. Patent No. 6,193,326) teaches an apparatus for braking system a set of aircraft wheels.

10.5 Yamamoto et al. (USPG\_PUB No. 2004/0104618) teaches a vehicular brake control apparatus and control method of vehicular brake apparatus.

11. Claims 1-7 are rejected and Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 18, 2006

APL

  
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11/24/06